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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,069	02/09/2007	Nils Eric Stjerna	10400C-000234/US	3299

30593 7590 01/26/2010

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EXAMINER	
KELLEHER, WILLIAM J	

ART UNIT	PAPER NUMBER
3673	

MAIL DATE	DELIVERY MODE
01/26/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,069	STJERNA, NILS ERIC	
	Examiner	Art Unit	
	WILLIAM KELLEHER	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5, 11-13, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Meutsch (U.S. Patent 1,455,847).

Regarding Claim 1, Meutsch discloses a spring mattress with longitudinal strings comprising a plurality of interconnected coil springs enclosed in covers, and a plurality of parallel strings arranged side by side and interconnected by a surface attachment between abutting surfaces (17 of Meutsch is considered to be a surface attachment which keeps abutting surfaces of each of Meutsch's strings together), wherein a slit (16) is provided between at least two coil springs located adjacent to one another within the same string, the slit allowing an increased interjacent separation distance to be formed between said adjacent coil springs.

Regarding Claim 2, Meutsch discloses a spring mattress as claimed in claim 1, wherein the slit is provided the slit is completely enclosed between an upper and a lower part of the string.

Regarding Claim 3, Meutsch discloses a spring mattress as claimed in claim 1, wherein the slit is provided between all adjacent coil springs in all the strings arranged in parallel.

Regarding Claim 5, Meutsch discloses a spring mattress as claimed claims 1, wherein the covers are joined together on both sides along the slit to close the covers along the slit.

Regarding Claim 11, Meutsch discloses a method of manufacturing a spring mattress, the method comprising : arranging coil springs enclosed in covers in longitudinal strings, and interconnecting a plurality of parallel strings side by side by a surface attachment between abutting surfaces and, providing a slit between at least two coil springs located adjacent to one another within the same string, such that the slit allows an increased interjacent separation distance to be formed between these adjacent springs. Meutsch discloses enclosed springs, interconnection of strings, and providing a slit.

Regarding Claim 12, Meutsch discloses a method as claimed in claim 11, wherein the slit is provided such that the slit is completely enclosed between an upper and a lower part of the string.

Regarding Claim 13, Meutsch discloses a method as claimed in claim 11, further comprising joining together a cover material on both sides along the slit to close the covers along the slit. One of ordinary skill in the art would have recognized the slit could be formed after the cover material is joined because a slit could cause the cover material to shift while it is being joined.

Regarding Claim 15, Meutsch discloses arranging a strip of a cover material so that it is folded over springs arranged in succession therebetween, providing a longitudinal joining line at the open end of the strip thus folded (Meutsch is closed at the top and bottom of each string), and arranging, before or after providing the longitudinal joining line, at least one transverse joining line between adjacent springs in each pair of springs. Meutsch shows that the cover is joined where the slit is formed and is therefore considered to disclose transverse joining lines.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4, 7-10, 16, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meutsch.

Regarding Claim 4, Meutsch discloses the apparatus of Claim 1, but does not disclose slits located between only some of the springs. However, the Examiner takes Official Notice that it is well known in the art of mattresses to vary the properties of a mattress to create "zones." Creating zones is a well known way to provide varying amounts of support to different portions of a user. Therefore, one of ordinary skill in the

art would have recognized that Meutsch could be modified to create zones of varying properties to provide Meutsch with the predictable established function of zones (which is to provide varying amounts of support to different portions of a user).

Regarding Claims 7-9, 24-26 it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the sizes, ratios, and dimensions claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding Claim 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a weldable material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v. Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ 331.

Regarding Claim 16, one of ordinary skill in the art would have recognized that the slits could be performed at the same time as the transverse joining lines to reduce the amount of time required to create the apparatus.

3. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meutsch in view of Stumpf (U.S. Patent 4,578,834).

Meutsch does not disclose gluing or welding. Stumpf, however, discloses, in Figure 4, using an adhesive at 28 to "adhere a pair of barrel-shaped pocketed coil

springs together." One of ordinary skill in the art would have recognized that Meutsch could also use adhesive to provide Meutsch with the predictable established function of adhering a pair of barrel-shaped pocketed coil springs together.

4. Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumpf (U.S. Patent 4,986,518) in view of Meutsch and Stumpf ('834).

Regarding Claims 17 and 20, Stumpf ('518) discloses means for arranging coil springs enclosed in covers in longitudinal strings (See Figure 2). Stumpf ('834) gives motivation to add a surface attachment between abutting surfaces (see discussion of adhesive above). Stumpf ('518) does not disclose means for creating a slit. Meutsch discloses a slit between springs. One of ordinary skill in the art would have recognized that slits (and the associated machinery needed to create them) such as Meutsch's could be added to the apparatus of Stumpf ('518) to provide Stumpf with the predictable established function of the slits (which is to allow the springs to flex in relation to one another or to allow a stiffener such as 17 of Meutsch to be added).

Regarding Claim 18, the slit of Meutsch is completely enclosed in the string.

Regarding Claim 19, Stumpf ('518) discloses slits which are closed along the covers.

Regarding Claim 21, Stumpf ('518) discloses means for arranging a strip of a cover material so that it is folded over springs arranged in succession therebetween, means for arranging a longitudinal joining line at the open end of the strip thus folded (Stumpf shows the cover closed at the top and bottom of each spring), and means for

arranging at least one transverse joining line between each pair of adjacent springs. Stumpf shows the material "pinched" between each spring, creating a transverse joining line.

Regarding Claims 22 and 23, Stumpf shows a tool (at 100U) which is movable towards the cover material and therefore it would have been obvious to make a slit tool move in the same way. It would also have been obvious to put the tool adjacent to one another, because the transverse joining line and seam are at approximately the same location on the end product.

Response to Arguments

Applicant's arguments filed 11/12/09 have been fully considered but they are not persuasive. Applicant argues that the lacing strip of Meutsch is not a surface attachment between abutting surfaces. The examiner notes that when two strings of coils are joined, an abutting surface will be formed at each spring at each coil. As 17 of Meutsch runs perpendicular to the direction of one string, 17 will be between two different abutting surfaces. In the alternative, if Applicant intends to claim "abutting surfaces" to mean two different surfaces, one on each string, that meet at the same point, the Examiner notes the discussion of Claim 6. A reasonable rejection could be made applying the teaching of glue.

Applicant argues that Meutsch can not allow increased separation between springs because the springs of Meutsch are enclosed in lacing strip 24. The Examiner notes that when a mattress is used, the springs will be compressed and forced in many

different directions. Absent any structural differences, the mattress of Meutsch is considered inherently capable of operating as Applicant's invention (increased separation between springs).

Applicant argues that 16 of Meutsch is not "completely enclosed between an upper and a lower part of the string. The Examiner notes Figure 2 of Meutsch which shows 16 between the top and bottom of the string and is therefore considered enclosed between the upper and lower part of the string.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM KELLEHER whose telephone number is

(571)272-7753. The examiner can normally be reached on Monday - Friday 9:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3673

/W. K./
Examiner, Art Unit 3673